

Revision of the Genus *Pandanus* Stickman, Part 24 *Seychellea*, a New Section from the Seychelles Islands

HAROLD ST. JOHN¹

Seychellea sect. nov. (subgen. *Pandanus*)

CARPELLIS BINIS CONNATIS, stigmatibus binis arcuatis in lateribus oppositis cavitonis terminali affixis, cavo cum stigmatibus falsis cordatis multis, dissepimento lato toto ex fibris longitudinalibus distinctis multis formatis. Arbor cum syncarpiis grandibus sphaericis.

Carpels 2, connate throughout; stimas 2, like slender arcs on opposite sides of the terminal cavity which is filled with many elevated, cordate, unequal structures that imitate stigmas; dissepiment with a pale, thin, cartilaginous tissue next to each seed, then all the rest of the broad interior solely of many, strong, separate, longitudinal fibers. Tree with large spherical syncarps.

HOLOTYPE: *Pandanus Hornei* Balf. f., in Baker, Fl. Mauritius and Seychelles 397, 1877.

This species, when described, was not placed in a section. Later it was assigned to section *Vinsonia* by Warburg (Pflanzenreich IV, 9:54, 57, 1900), and with this placement Martelli concurred (Webbia 4(1):94, 1913). In his redefinition of the sections, the present writer placed it in section *Dauphinensia* (Pacific Sci. 15(3):341, 1961). He now removes it from there and makes it the type of a new section. Like the Madagascar species of section *Martellidendron*, it is remarkable for having the dissepiment between the seed cavities formed not of a solid, bony tissue, but of a mass of distinct, longitudinal fibers. Also the two arclike stigmas, on opposite edges of the apical disc or concavity, are very similar.

As for differences, the section *Martellidendron*, with 4 species from Madagascar, has the dissepiment solely of loose, longitudinal fibers; the phalange apex truncate, with an elliptic, firm disc, divided into quarters by deep valleys; the 2 stigmas lateral on opposite sides of the

disc. The section *Seychellea* has the dissepiment of pale, thin, cartilaginous tissue next to each seed face, then all the rest of its broad interior made solely of many strong, separate, longitudinal fibers; the 2 arclike or parenthesis-like stigmas lateral on opposite sides of the rim of the apical cavity which is filled with many cordate pseudo-stigmas.

Judging by Martelli's illustration (Webbia 4(1):t. 16, fig. 2, 1913) the fruit would be a 1-celled drupe. His specimen has been examined. He had a whole syncarp, but sectioned only one phalange. He made the cut between the two stigmas, just shaving the fibrous dissepiment, and cleaving only one of the two seed cavities. That the other seed cavity is there can be told by pushing a needle through the fibrous dissepiment. The phalanges seem to be always 2-celled. A new drawing is presented here to bring out the diagnostic structure of the dissepiment.

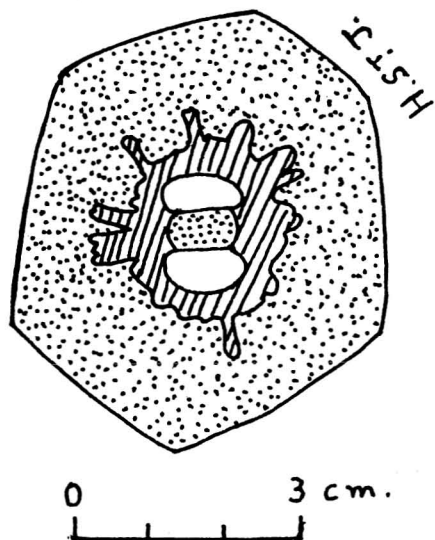


FIG. 244. *Pandanus Hornei* Balf. f. in Baker. Transverse section of phalange, showing fibrous septum, two seed cavities, endocarp, fibrous mesocarp, and exocarp, $\times 1$. Drawn from Isole Seychelles (FI).

¹ B. P. Bishop Museum, Honolulu, Hawaii 96819. Manuscript received March 11, 1963.

Pandanus Hornei Balf. f., in Baker, Fl. Mauritius and Seychelles 397, 1877; Warburg, Pflanzenreich IV, 9:57, 1900; Martelli, Webbia 4(1):17, t. 16, figs. 1-3, 1913; St. John, Pacific Sci. 15(3):341, 345, figs. 20-21, 1961 (sect. *Seychellea*).

Fig. 244

SUPPLEMENTARY DESCRIPTION: Leaves at midsection with 104 parallel secondary veins in each half, the tertiary cross veins visible below toward apex, forming square or short oblong meshes.

SPECIMENS EXAMINED: Isole Seychelles, dal Museo di Parigi (FI).

The new section can be placed in the key to

Pandanus (Pacific Sci. 14(3):226, 1960), by replacing the first heading R, with the following:

- R. Phalange with the septum between the two cells of many loose fibers,
 - 1. Septum wholly of loose fibers; phalange apex an elliptic disc cut by valleys into quarters; stamens umbellate on the capitate apex of the column, and with abortive gynoeceum. *Martellidendron*
 - 1. Septum of a thin cartilaginous tissue next to each seed, then its broad interior solely of loose fibers; phalange apex concave and filled with unequal, cordate pseudo-stigmas. . . *Seychellea*